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AUTHOR	Crooks, Lois A.
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ABSTRACT

The Assessment Center Method is a comprehensive, standardized procedure in which mulitple appraisal techniques are used in combination to evaluate individuals for various purposes, primarily used in a business setting to identify those with potential for higher level procedures. The dimensions to be observed and measured in an assessment center program should stem from factors demonstrated to be inherent in job performance at the target level. Techniques generally used in assessment center programs such as the in-basket, the leaderless group discussion, techniques of group observation, management games, and role playing are described. The selection or development of these techniques depends on the time and resources available to the organization considering the use of the Assessment Center Method. (BB)

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THE SELECTION AND DEVELOPMENT OF PERFORMANCE MEASURES FOR ASSESSMENT CENTER PROGRAMS

Lois A. Crooks

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Background

The Management Progress Study, initiated by A T & T in 1956, is the first known industrial application of the assessment center method.[1] In an early presentation (Bray, 1962), this research was described as "a study in developmental psychology" by the "longitudinal case study method." The 422 men brought into the study were to be followed up annually and to be reassessed at seven-year intervals, "in an effort to keep track of all the specifics in their lives and their reactions to these specifics--their development or lack of development." The assessment results were not to be fed back to the management, so that progress of the men would not be affected by the assessment findings.

The results of this study have been well documented. In fact, between 1961 and 1967, except for two studies done in the armed forces (Holmen, 1956; MacKinnon, 1958), the only research on assessment in the literature was reported by A T & T. This history is given because the assessment center format developed by A T & T became the model for most of the programs initiated by other companies.

John Hemphill, then at Educational Testing Service, worked with A T & T on the design and materials for the first assessment center application. Three types of simulation exercises were used. What is believed to be the first business in-basket exercise was developed by ETS and the management training group at A T & T for the assessment program. The miniature business game used was a manufacturing team exercise using tinkertoys. This had been developed for use in small group research in leadership and the nature of group dimensions at Ohio State done by Hemphill and others.

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[1] A comprehensive, standardized procedure in which multiple appraisal techniques are used in combination to evaluate individuals for various purposes, primarily used in a business setting to identify those with potential for higher level positions.

The other type of simulation was in the leaderless group discussion format (Bass, 1949), where in a structured or unstructured small group situation the interpersonal effectiveness and roles of participants in group process can be observed.

In addition to the simulation exercises, a general ability test, an adaptation of a projective-type test, various experimental pencil-and-paper tests, and a personality inventory were administered. The in-basket exercise was not scored objectively. Ratings of performance on the in-basket were made by assessors who read the responses. A narrative report was written which included observations from an interview conducted with the assessee on his in-basket performance shortly after he finished taking it. Evaluation of performance on the other two simulations included peer ratings or rankings, observer ratings, and narrative descriptions of participant behavior. Final ratings on the assessees were made on the basis of reports from all assessment techniques, and a summary report was written on each individual.

From this early beginning and after highly favorable research results were published by A T & T, other companies began assessment programs, notably SOHIO, IBM, Caterpillar Tractor, General Electric, and Sears. However, by 1969, only ten companies were known to have assessment programs. By this time, A T & T had assessed 50,000 people at various levels.

As others have pointed out, the concept of assessment has mushroomed since 1969, and at the present time, reliable sources estimate that more than 300 companies in the U. S. have viable assessment programs. Many more would be interested if a "quick and dirty" way of implementing a program could be devised.

Initially, visitors from other companies flocked to A T & T to observe their assessment centers and to ask for copies of their exercises, rating forms, manuals, and whatever else was available. Even today, in observing programs from company to company, the basic A T & T format described above is readily discernible. However, many companies have found it necessary to develop or adapt materials to fit their special needs, or to buy materials from other sources. Consultants are available who will come in and "lay on" an assessment program, providing "canned" materials or adapting "canned" materials, and training company staff members as assessors.

Until recently, A T & T has provided most of the reliability and validity data on assessment centers. Other companies have published descriptions of their programs, but only a few, such as IBM, SOHIO, Caterpillar Tractor, and Sears, have published research results.

Necessary Research for New Programs

Some companies, in initiating assessment programs, have done necessary preliminary research to identify characteristics of the jobs and present job incumbents in the target population for which they are assessing potential of candidates. From this research, they decide on dimensions to be measured and look for or develop appropriate ways to measure these dimensions.

Many other companies have tended to rely on previous research or to draw on selected lists of characteristics which have been defined by others as important for performance as a manager, a supervisor, a foreman, or whatever the target job is. Then they look for ways to assess these characteristics, again relying on experience of other companies or consultants. Thus, assessment programs tend to perpetuate themselves, with little

innovation or validity research from program to program. This is a generalization, however, and there are exceptions.

To be able to demonstrate job relevance and content validity in the selection or development of appropriate assessment exercises, an analysis of the jobs in the target population should first be undertaken--that is, analysis of the jobs at the level for which candidates will be assessed. The range of specific knowledges, skills, aptitudes and abilities, and personal characteristics important to job performance at that level should be identified and defined by relating them to the range of duties and responsibilities encountered at this level. Patterns of interaction, allocation of time, communication patterns, level of accountability and vested authority, the kinds of problems that have to be solved, the human, material, and financial resources typically available to the job incumbents at this level should also be determined. The overall organizational objectives, climate, and policies of the company should be taken into account. These elements may differ more than the somewhat generalizable functions of managerial jobs from company to company and may impinge on the relative values ascribed to characteristics of managerial performance.

Such detailed information cannot be obtained from reading job descriptions, although that may be a way to begin. Other ways of obtaining needed information about target jobs are structured interviews with job incumbents and their supervisors, observation of job incumbents at work, a sampling of in-and-out baskets, daily activity logs, questionnaire surveys like Hemphill's Executive Position Description Questionnaire (Hemphill, 1960), McCormick's Position Activities Questionnaire (McCormick, et al., 1972), or a tailor-made questionnaire. In interviews with people on the

job, questions might relate to the kinds of problems they deal with, what would happen if they made an error in judgment, what characteristics they would look for in selecting someone to succeed them, their perceptions of their managerial style or philosophy, and the like. (A foreman or first-line supervisor can describe his managerial style or philosophy very well, and differences in point of view are as clear as at higher managerial levels.)

From this preliminary study, a list of factors that appear to be most important to performance at the target job level can be derived. Decisions as to which of the factors it will be possible or feasible to measure or observe in an assessment center program should depend on the combined judgments of the professional staff and a committee of advisors from the target job level. Planners may have to limit the scope of measurement because of time constraints set for assessment, which has to be done off the job. Important factors not amenable to measurement in the assessment center should be identified and other means of evaluating them described.

Various lists of dimensions have been defined and used in assessment programs, ranging from as few as seven or eight to 26 or more. A T & T uses 20 to 25 dimensions, depending on the level being assessed. It is difficult to observe, record, and make discrete judgments on so many dimensions, no matter how carefully defined, and statistical analysis discloses considerable overlap. A recent catalog of assessment and development exercises (Development Dimensions, 1973) contains a representative list of 26 "Dimensions of Managerial Success." The dimensions and definitions are generalizable to some extent across organizations, although it is not suggested that all of these will be utilized in a typical assessment program.

The selection or development of methods or techniques by which to assess the factors decided upon as important to performance at the target job level depends to a great extent on development time and resources available to the organization and staff. The decision to tailor-make exercises in the context of the company or a prototype of the company setting may call for an investment in time, cost, and creative effort which may not be readily forthcoming, even with consultant help. If this is the case, selection then depends on buying or borrowing from others. Such materials can then be adapted or used according to needs. There are strong arguments for "tailor-made" rather than adapted or "canned" exercises, particularly on the basis of face and content validity, direct job-relatedness, and acceptability to those being assessed.

Types of Exercises Commonly Included in Assessment Programs

The types of exercises commonly included in assessment programs will be described briefly in the following section, with the dimensions usually considered to be measured by each suggested. This is not an exhaustive list--additional exercises and permutations of them depend on the ingenuity of the staff, the realism desired, and the limitations of time and logistics.

In-Basket Exercises

An in-basket exercise of some kind is included in the majority of assessment programs. Early developmental and experimental work utilizing the in-basket technique was done by Frederiksen, Ward, Hemphill, and others at ETS. The person taking the exercise is provided with selected background material and references and a package of problems which have built-in priorities, relationships, and required decision-making. The assessee is asked

to work on the problems in a specific time period as if actually on the job as described in the instructions. In this way, a sample of the person's administrative behavior is obtained. It has been demonstrated that the written record of this behavior can be scored or evaluated on a number of dimensions to yield measures of performance (Lemphill, et al., 1962).

Many companies have developed their own in-basket exercises, some of them with the help of ETS and other consultants. Others have used "off-the-shelf" materials. The majority of assessment center programs are directed toward identifying potential among assessees for higher level jobs within an organization, rather than for selection from a pool of job applicants. Thus, from the standpoint of face and content validity, and perhaps acceptability, the tailor-made version in the company's own or similar setting may have the advantage. The role assumed by the assessee can be set at the target level and a realistic mix of problems can be developed to be handled in terms of company policies and procedures. In-basket exercises have been developed at the foreman or first-line supervisor level, at the lower and middle management levels, and at the senior level. It is possible to develop this type of exercise for any job where administrative activities are an important element.

In the interest of expediency, most users do not score the in-basket test used in their assessment centers. Assessors read the protocols and make notes of areas to follow up in a structured interview. In this interview, the individual's handling of the in-basket is discussed with him and his understanding of problems in the in-basket probed. Ratings of the performance are then made by one or more assessors or other staff members

on such factors as organization and planning, decisiveness, use of delegation, etc., and a description of the performance and the interview is written in narrative form.

Where in-baskets are scored, analysis of the responses to the in-basket problems is done by a trained scorer who records in a systematic way what action is taken, how it is taken, and why it is taken, as reported by the assessee. Scoring dimensions are related to factors in in-basket performance found in early research (Frederiksen, 1962), and to recognized aspects of administrative behavior. They include stylistic as well as quantitative and qualitative variables. Such dimensions as Taking Leading Action to Solve Problems, Exercising Supervision and Control, Problem Analyzing and Relating, Delegation, Systematic Scheduling, Quality of Actions Taken, and Amount of Work Accomplished are derived from the scorer's analysis of responses. The scorer also makes a subjective rating of overall performance and writes a narrative report describing characteristics of the performance. The Quality of Actions score is derived by comparing actions taken by the assessee with actions judged appropriate or inappropriate by consensus of a group of experienced managers. It would be advantageous, perhaps, to add an interview with the assessee but some of the characteristics observed in such an interview can be observed in other exercises. The disadvantage of detailed scoring is the time involved and the need for a trained scorer.

One consultant (Byham, 1973) suggests that by use of the reader-interviewer method of in-basket evaluation, such dimensions as Impact, Energy, Written Communication Skills, Sensitivity, Planning and Organizing, Management Control, Use of Delegation, Judgment, and Decisiveness may be observed

and rated. The reliability of these judgments has not been tested. Little research evidence exists which compares evaluations made by the two methods. In one study (Huse, 1968), in which ratings of in-basket performance made on the basis of reading and interview were correlated with scores derived by detailed scoring by the method described above, relationship between the two types of evaluation was low.

Management Games

As described early in the paper, A T & T first used a team exercise involving manufacture of prototypes using tinkertoys. A T & T later developed a stock market game for assessment programs at higher levels. Such games or simulations can be developed in the company context or at least adapted for face validity, if desirable, although there is no research evidence as to whether face validity makes a difference in eliciting the desired behaviors. The usual format of a game is a team situation involving buying and selling, where objectives must be set and the team must organize to meet them. In a game in which component parts are bought to manufacture prototype products, teams can be given the instruction to maximize profits and this would involve deciding what parts and how many to buy and which products to manufacture, depending on prices offered. Dimensions suggested as possible to assess, depending on conditions set, are planning and organizing skills, leadership behavior, communication skills, problem analysis, judgment, initiative, decisiveness, and flexibility, again with cautions as to the difficulty of sorting out behavior on so many dimensions.

Leaderless Group Discussions

Leaderless group discussion problems may be classified as having non-assigned roles and assigned roles. In the first type, the group of

participants (3 or 6) is handed short case studies or management problems, and as consultants are asked to resolve the problems and present a written recommendation. Problems dealing with supervision, business judgment, conflicts between departments and employees, job dissatisfaction, and setting of priorities among alternative actions are examples, depending again on important factors in job performance at the target level. Both quality of thinking and group process variables can be observed.

An example of the second type of leaderless group discussion with assigned roles is one used by a number of companies. Each of six assessees in a group is given a description of a fictitious subordinate he is recommending for promotion. The descriptions are formulated so that the candidates are about equally qualified. The assessees study their candidate descriptions and each is then allowed five minutes to make a pitch for his man. After all six assessees are heard, a period of free discussion is followed by a rank-ordering of the job candidates by the assessees from most deserving to least deserving. Assessors observing the group (each assessor observing two assessees) judge the assessees on ability to sell their candidates and what they have done to aid the group in reaching a decision. Here again individual skills and group process variables can be observed.

It is fairly easy to formulate problems which have face validity not only for the level being assessed but also for the company context. Whether setting problems in the company context is an important aspect of such LGDs is not known, but formulating situations which are appropriate for the level being assessed is important to assure involvement and to elicit the behaviors of interest.

Analysis/Presentation/Group Discussion Exercises

At the lower and middle management levels and above, managers may be required to analyze complex situations and data, to consider alternatives, and to make presentations before groups of peers, their superiors, or to outside groups. If this activity is found to be an important element of the target level job, such an exercise might be included in the assessment program. It can be built around financial analysis, new products and sales strategy, or proposals for new programs in the personnel area (i.e., an assessment program), according to usual practices of the company. The assessee usually receives unorganized data so that he has to analyze and organize it in order to prepare a presentation. This is sometimes a homework assignment or time is set aside in the program. It may be effective and realistic to combine this with questions from the group. In the latter case, assessors not only may observe the ability to analyze, organize, and present data in an orderly way, oral communications skill, and judgment in focusing on issues, but also personal characteristics such as stress tolerance, impact, flexibility, etc.

Interview Simulations

These exercises are valuable where the incumbent in the target job spends considerable time dealing with the public or internally on a one-to-one basis or is responsible for hiring or appraising subordinates. Most of these simulations involve role-playing, with the assessee placed in the target role. An assessee in a customer service role might receive an irate telephone call (which the assessee receives privately) or deal with a disgruntled customer face-to-face. Another situation might involve the supervisor or foreman discussing a personal problem with a subordinate

or discussing his performance. In a role-reversal, the assessee himself may be interviewed by his superior on his first day on the job or receive counselling. In these situations, the assessee's ability to think and communicate in a stress situation, impact, energy, listening skill, tenacity, flexibility, and the like, have been suggested as characteristics to be observed.

Other Interviews

The in-basket interview has been discussed previously. In some assessment programs there is also included a personal interview in depth with the assessee to allow him to express his career expectations, his work standards, and his motivation. This is another opportunity to observe personal characteristics.

Fact-Finding and Decision-Making

A variation of the Analysis/Presentation/Group Discussion format is one in which the assessee collects data on a problem verbally by asking questions of a resource person, then has to present the problem and his conclusions either verbally (during or after which session he submits to questioning) or in writing. Reasoning ability, thoroughness in gathering data, defensibility of conclusions, and written communications skills may be observed and evaluated. Other variables enter in if report is oral, such as persuasiveness, stress tolerance, oral communications skills, and the like.

Writing Exercises

These may be in the nature of filling out forms, writing an essay, or writing an autobiography. Ability to fill out forms accurately from unstructured information received in writing (or orally) may be an important element in some kinds of jobs. Written communication skills may be important in others.

Pencil-and-Paper Tests

In many assessment programs no pencil-and-paper tests other than the in-basket are used. In others, a general ability test is administered, and a personality inventory, creativity or other special tests might be included. Some programs administer such tests only for research or counselling purposes, not including results in final assessment data; others use them to measure job-relevant aptitudes not readily measurable in other ways.

These are the basic types of assessment exercises used in assessment center programs, with the number, type, and content dependent on the target job level, time constraints (one day to as many as four days), and the characteristics or dimensions identified as most important and most feasible to assess. In the following section, an assessment program will be described in which some of these types of assessment exercises have been combined in an innovative manner.

A Senior Level Assessment Program

The process of deriving dimensions to be assessed and the selection of components for assessing these dimensions may be observed in the description below of the development of an assessment center program at the senior level.

The objective of the program is to identify potential candidates for senior level management in the Canadian government. Those identified will undergo an intensive three-months' training program away from the job and then follow a course of job rotation and counselling with expectation

of reaching senior level at some time in the future. The candidates are usually three or four levels below entering senior level positions at the time they are assessed, and are nominated for the program by their managers in the various departments of the government.

Steps in the developmental aspects of this program followed quite closely those suggested early in this paper, beginning with analysis of the work of senior executives by use of the Executive Position Description Questionnaire, selected interviews and daily activity logs, and survey of characteristics of present senior level population (amount and type of education and experience, age and sex distribution, functional areas of work, perceived relative importance of a range of abilities, skills, and personal characteristics to performance at the senior level). With the assistance of an advisory committee of senior executives, research staff identified a list of attributes considered most important to performance at the senior level in the Canadian government.

Consideration was then given to which of these could be measured or observed in an assessment program. Twelve dimensions were selected: Intelligence, Motivation, Analyzing and Synthesizing Skills, Quality of Judgment, Leadership Qualities and Skills, Planning and Organizing Skills, Oral Communication Skills, Appropriate Delegation to Subordinates, Stress Tolerance, Interpersonal Relations and Awareness, Independence (of thought and action), and Creativity (fluency, flexibility, and originality). These attributes were then defined in behavioral terms in relation to the work of senior executives. The design of job relevant exercises was undertaken to measure these dimensions.

The survey of the senior executive population had shown that 75 percent of the jobs were in the general management category, and the remaining 25 percent were in policy-making roles or were technical or subject-matter specialists. Given this emphasis, the decision was made to focus on the general management role in the assessment program. The point was made that management is an activity that everyone gets into at some time at some level, whether or not the individual's primary function is management.

The first exercise to be developed was an In-Basket Test. The role simulated was that of Director General of Personnel and Administration, these functions having generalizability and impact across most management jobs. The simulated organization was a prototype government agency, not one already existing but having the characteristic structure. A set of typical problems was developed with the help of an advisory committee of senior executives and from material gathered in interviews. This in-basket was pretested by eliciting the cooperation of nearly 150 senior executives. They also took another in-basket test with the role set at a lower management level, on which data had been gathered in early research in the government (Crooks and Slivinski, 1972), and a number of other measures to provide some additional benchmark data. Performance ratings were obtained from Deputy Ministers on these executives with their consent for concurrent validation purposes. A scoring procedure for the in-basket test was developed which provided detailed scoring data for research purposes as well as specific scores to be included in the assessment center process.

It was decided fairly early in the planning that the other exercises in the assessment program would grow out of the in-basket test

simulation. The intent was to provide a continuous build-up of information and realistic experience for the assessee as critical elements of the simulated senior executive's job were reproduced in the assessment exercises.

The most frequent patterns of interaction found in activity logs of senior executives were with subordinate staff, with superiors, with other government agencies, and with peers. All of these elements are incorporated into the situation simulated in the in-basket, and were then utilized in designing the other exercises.

A walk through the assessment center will illustrate the way in which the exercises develop. Twelve individuals are assessed in a two and one-half day program. After orientation in the first afternoon, they take the in-basket test in a group (two and one-half hours). When this is completed, they are told that they will retain the role they assumed in the in-basket throughout the program. They are given a folder and the opportunity to make notes on any in-basket problems or situations "they may wish to follow up." They also each receive a memo from the President, their superior in the simulated organization, setting up a personal meeting "to discuss problems and to offer assistance." Prior to this, they are instructed that they are to have a meeting with their staff (five division heads introduced in the in-basket), who will brief them for the meeting with the President.

Beginning the following morning, the assessees are divided into two groups of six. Three assessors, senior executives who have undergone a week of intensive training in all aspects of the assessment program, are assigned to each group of six, and these two modules proceed concurrently and separately through the center.

Each assessee meets with his staff in turn. This is a live meeting. The staff members are played by actors who have been carefully briefed and rehearsed in a prepared script, according to the personalities and roles described for them in the in-basket. The assessee is handed materials, is asked questions and to make decisions by his staff, and can thus take the leadership role prescribed for him according to his ability to understand and adjust to the situation. This meeting lasts an hour. The assessee then has a period to prepare for his meeting with the President. This meeting then takes place, also live, with the role of the President played by an actor. The President has an abbreviated script with prepared questions. He is a supportive senior person of stature as described in the in-basket. An assessor, present at the meeting, is introduced as an assistant.

The two assessors, one present at the staff meeting and one at the President's meeting, then write separate reports on the process they observed and describe behavior on dimensions they were to have been observing. Since they are both familiar with in-basket content and the staff meeting script, they can report synthesis of this information in the two meetings. The dimensions to be observed in these two exercises are Oral Communication, Stress Tolerance, Quality of Judgment, Interpersonal Awareness, Leadership, and Analysis and Synthesis.

The next exercise is a meeting with representatives of the agency responsible for reviewing and approving budget allocations. This meeting is set up to occur immediately upon the return of the assessee from a hypothetical business trip. His staff has prepared a file of information which he has to assimilate and organize for a presentation of his preliminary

budget forecast. The file includes a lengthy proposal from one of his five division heads, estimates of staff and other expenses for the next three years from each division, and supporting memos from each division head. In order to prepare an adequate presentation, he also has to incorporate information gathered from previous exercises. Time is set aside for the assessee to prepare for this presentation. Two assessors play the roles of the program planning officers of the agency to whom the presentation is made. They have an abbreviated script and prepared questions, as needed.

In the final exercise, the President, in a memo which each assessee receives individually, sets up a task force of the six assessees in their role as the Director General of Personnel and Administration to work on problems in the organization first emerging in the in-basket, reinforced and enlarged upon in the Staff Meeting, the meeting with the President, and in the budget presentation. The assessees are given a period of time to prepare for this meeting and come to it prepared to present and back up their individual points of view. They do not appear to find it unusual to be in a meeting of five others in the same role. They are asked to reach consensus on a plan of action in a two-hour discussion and to prepare a written document for the President's consideration. The three assessors in this module are present, with each one responsible for observing and recording behavioral data on two assessees on the dimensions being measured in this exercise.

In addition to the exercises described, assessees are asked to complete a number of pencil and paper measures primarily for career counselling and research purposes, including the Strong Vocational Interest Blank, a General Intelligence Test, the Structure of Intellect Model Test

(of creativity), the Administrative Judgment Test (U.S. Civil Service), and a Personality Research Form. These are scheduled into the Assessment Centre as the flow of the exercises permits. At the final integration stage, assessors get results on the GIT and SIM only, in terms of norming data from the senior executive pretesting.

In this assessment center program, there is great involvement by both assessees and assessors because of the realism and the continued integration of information and interaction. The descriptions of each assessee's elicited behavior in a variety of circumstances provide the assessors with ample evidence on which to base their consensus ratings on each dimension and overall. These ratings are made on a seven-point scale with the midpoint representing the minimum level required for performance as a senior executive. Three hundred candidates, both men and women, have gone through this assessment program at date of writing. The program has been conducted in both the English and French languages. A report is in press describing in more detail the dimensions measured, planning and scheduling of the program, the feedback process, and research findings (Slivinski, et al.).

An Early Identification Program

In contrast to the complexity of the program at the senior level, A T & T has developed a one-day assessment program for the early identification of management talent. The program was designed to evaluate substantial numbers of short service employees, with the goal of accelerating the placement and development of those showing good potential for further advancement. The program includes both the gathering of assessment data and

evaluation of supervisory potential in a single day. Six candidates (both men and women) are assessed per day.

The first exercise is a leaderless group competitive problem designed to evaluate interpersonal skills. Six candidates arrive at a mutual decision. Each candidate is asked to make a short oral presentation defending his or her point of view.

An In-Basket Test, developed for this program, is administered, which has the same organizational setting as the group exercise. Each participant is then interviewed by a staff member to determine the rationale behind his or her decision-making process.

A personal interview and a background biographical questionnaire are designed to elicit information concerning a candidate's interests and career expectations. This may be used for placement and development recommendations.

A written exercise, also related to vocational interest factors, as well as a general mental ability test are used.

The qualities rated are: Leadership, Forcefulness, Dependence on Others, Energy, Decision Making, Oral Communications Skills, Written Communications Skills, and Scholastic Aptitude. The assessment staff prepares reports on each individual's performance in the group exercise, in-basket, and interview, which are read at the evaluation session at the conclusion of each day's activities. Each quality is rated and an overall rating of potential to assume supervisory assignments is made.

In a research study, the effectiveness of the judgments made in the early identification center were evaluated by subsequently assessing a group of candidates from the early identification center in the more

extensive assessment process used by the Bell System. Correlations between ratings made on qualities in the two assessment programs ranged from .47 to .73, with the strongest relationship between the overall ratings for the two assessments (.73) (Moses, 1973).

These findings suggest that the one-day assessment center is a promising technique where high volume assessment is needed. However, A T & T's program is based on long experience in assessment, knowledge of the range of jobs to be filled, and on continuing research. No research evidence exists at present as to the effectiveness of such an abbreviated assessment program for higher level management jobs.

Summary

In summary:

1. The dimensions to be observed and measured in an assessment program should stem from factors demonstrated to be inherent in job performance at the target level.
2. There is plenty of leeway for innovation in selecting and developing assessment exercises or techniques to measure the dimensions identified.
3. Research has produced such techniques as the in-basket, the leaderless group discussion, techniques of group observation, management games, and role-playing. Published theoretical and applied research should be continually monitored to seek out other ways to identify and measure factors found to be relevant to job performance.
4. Assessment programs should be preceded and followed by research, not only to satisfy EEOC guidelines but to be able to demonstrate the validity of the technique and the long-term benefits to the organization in terms of improvement in overall performance of staff.

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